

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
NORTHERN DIVISION**

ROBERT NEEDHAM,

Plaintiff,

CASE NO: 04-CV-10149-BC

v.

DISTRICT JUDGE DAVID M. LAWSON  
MAGISTRATE JUDGE CHARLES E. BINDER

THE ROHO GROUP, a foreign  
corporation,

Defendant.

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**ORDER ON DEFENDANT'S MOTION TO PRECLUDE  
DR. FELTON FROM TESTIFYING AT TRIAL**

(Dkt. 155)

**DEFENDANT'S MOTION TO PRECLUDE  
DR. MIDDENDORF FROM TESTIFYING AT TRIAL**

(Dkt. 156)

**AND DEFENDANT'S MOTION TO EXCLUDE THE  
PLAINTIFF'S SUPPLEMENTAL EXPERT REPORTS  
FROM DR. MIDDENDORF AND KYLE HAMILTON**

(Dkt. 154)

**I. Introduction**

Pending in this products liability action, pursuant to an Order of Reference from U.S. District Judge David Lawson, are the above-entitled motions. Plaintiff has filed responses opposing each motion (Dkts. 171, 170, 178), and Defendant has filed replies (Dkts. 176, 175, 182). Oral argument was heard on April 4, 2006, and the motions are now ready for decision.

## **II. Facts and Arguments of the Parties**

Plaintiff's complaint alleges that defects in the design of a wheelchair seat cushion caused Plaintiff, who is quadriplegic, to sustain serious injuries. Plaintiff's responses to Defendant's motions state that Plaintiff claims damages under at least eight distinct theories, including breach of express and implied warranties, breach of reasonable design standards, breach of operations manual warnings/instructions, and gross negligence. (Pl.'s Resp., Dkt. 171 at 4; Pl.'s Resp., Dkt. 170 at 3.)

### **1. Dr. Felton**

Dr. Felton holds a Ph.D. in NeuroPhysiology. (Dkt. 171, Ex. 1.) Since 1987, he has been a rehabilitation consultant for the University of California and the Department of Veterans Affairs. Dr. Felton has also held positions as Director of Wheel Chair Seating & Positioning Clinic at a Veterans Administration Hospital, Clinical Scientist practicing at a VA Medical Center in California, and Director of Clinical Research at a VA Hospital, working in the areas of wheelchair seating and positioning of therapeutic supports. (*Id.*)

In 1997, Dr. Felton co-authored a peer-reviewed scientific article entitled "A Wheelchair Cushion Designed to Redistribute Sites of Sitting Pressure." (*Id.*, Ex. 2.) This study was published in the March 1996 edition of the Archives of Physical Medicine and Rehabilitation. The article discusses the design of an experimental cushion for wheelchair-bound patients and compares this experimental device with three other standard cushions. (*Id.*) Plaintiff represents that this is the only peer-reviewed scientific study comparing various wheelchair cushions.

In mid-March 2005, Dr. Felton authored a 27-page report relating to this case. (*See* Pl.'s Resp. to Mot. for Summ. J., Dkt. 169, Ex. J.) After a review of scientific literature relating to pressure sores in wheelchair-bound patients, descriptions of pressure thresholds, and intensification

of pressure in wheelchair-bound patients, as well as a review of pressure cushions, pressure measurement systems, and descriptions of his earlier described article, Dr. Felton opines that the cushion at issue in this case had a number of design defects “proven scientifically” which led the cushion to fail and bring about the potentially rapid development of pressure sores. (*Id.* at 27.) Dr. Felton also opines that ROHO officials were aware of the “many scientific findings in case studies” relating to the type of cushion at issue in this case which the doctor states “could have assisted them [ROHO] in making design changes to prevent the development of his [Plaintiff’s] pressure sore.” (*Id.*)

Defendant argues that Dr. Felton admitted during his deposition that he is not an engineer nor an expert in design or manufacture. Defendant maintains that Dr. Felton is unable to assist a jury with issues relating to causation or design. Plaintiff counters that Dr. Felton has for decades dealt with issues relating to wheelchair cushions in the practical hospital setting. Plaintiff maintains that both Dr. Felton’s peer reviewed scientific article, as well as his practical experience, are diametrically opposed to the product warranties given to Plaintiff by Defendant with the wheelchair cushion at issue. Plaintiff vigorously maintains that Dr. Felton is qualified both by his education and extensive personal experience to provide expert assistance to the jury.

## **2. Dr. Lorna Middendorf**

Dr. Middendorf has been a Human Factors Specialist and Consultant for over 30 years. (Pl.’s Resp., Dkt. 170, Ex. 1.) She holds an Associates Degree from the University of Chicago in social science counseling, a Bachelor’s Degree from Bowling Green University in social studies, and Ed.D. Degrees from Rutgers, Ohio State, Harvard and Wayne State University in ergonomics, safety engineering, statistics, automation technology, and counseling. (*Id.*) She is a member of the

Systems Safety Society, the Human Factors Society, the Society of Automotive Engineers, and the American and Michigan Psychological Associations. (*Id.*)

In mid-March 2005, Dr. Middendorf authored an “Expert Report” relating to this case. (*See* Pl.’s Resp. to Mot. for Summ. J., Dkt. 169, Ex. Q.) Dr. Middendorf reports that she reviewed patents, engineering drawings, customer documents, Plaintiff’s complaint, Defendant’s answer, ROHO Operations Manuals, Plaintiff’s medical records, photographs of Plaintiff’s wheelchair, and the cushion at issue, along with Plaintiff’s deposition and other records. After describing the “single manifold cushion” at issue, as well as instructional materials accompanying the cushion, Dr. Middendorf opines that ROHO failed to provide warnings regarding dangers which accompany over pressurization, the “bottoming out” of the cushion during use in an airplane, and the “bottoming out” due to temperature changes or shifts of position. In addition, Dr. Middendorf opines that other warnings regarding the valve or the proper adjustment of the height of the cushion were lacking. (*Id.* at 5-6.) After review of Plaintiff’s deposition, Dr. Middendorf states that even with proper use, the cushion at issue is likely to fail and cause serious injuries. She also opines that professional resources of scientific publications available to ROHO, as well as prior customer complaints, should have alerted ROHO to the hazards inherent in the use of the type of cushion at issue in this case. (*Id.* at 6-7.)

Plaintiff represents that subsequent to a large-scale production of documents, occurring late in the discovery process,<sup>1</sup> and after the opportunity to review materials produced at that time, in mid-December 2005, Dr. Middendorf prepared a supplemental report entitled “A Study Proposal for ROHO High Profile Single Manifold ‘Dry Flotation’ Cushion Facilitator Effectiveness.” (*Id.*,

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<sup>1</sup>This production took place subsequent to an order issued by Judge Lawson on September 15, 2005. (Dkt. 112.)

Ex. Q2.) This document proposes that a study be conducted to “measure the relative effectiveness of product facilitators in terms of behavioral compliance with the ROHO High Profile Single Manifold ‘dry flotation’ cushions as designed, promoted and sold for use with wheelchair seats.” (*Id.* at 1.) The purpose of the study would be to evaluate the effectiveness of alternate “facilitators.” By this, Dr. Middendorf means alternative warnings and instructions. The document describes a procedure for the choosing of test subjects and the preparation of alternate warnings and instructions. The document concludes by opining that “major findings of the study will identify relatively significant facilitators” for the cushion. Dr. Middendorf believes that these findings “may be used as a first step in a safety program” to minimize foreseeable misuse of cushions. (*Id.* at 3.)

In its motion, Defendant argues that Dr. Middendorf criticizes Defendant’s warnings but was unable to produce alternative warning language. Defendant argues that Dr. Middendorf cannot assist the jury in the “risk utility” analysis required under Michigan law. Plaintiff points to Dr. Middendorf’s human factors expertise and argues that the doctor’s opinions with regard to the design and, in particular, the warnings and instructions given with the cushion, will be of material assistance to the jury. Plaintiff also contends that Dr. Middendorf can properly testify relating to the defective nature of the instructions given with the cushion relating to the clearance or proper height of the cushion. Plaintiff also points out that Dr. Middendorf’s original report was issued prior to virtually any of the substantive discovery later produced by Defendant in response to orders from both this judicial officer and Judge Lawson.

### **3. Kyle A. Hamilton, P.T.**

Mr. Hamilton is a physical therapist located in Traverse City, Michigan. He holds a Masters Degree from Central Michigan University in physical therapy and a Bachelor of Science in

marketing from Northern Michigan University. (Dkt. 169, Ex.20.) Mr. Hamilton's work experience includes internships at three different hospitals, as well as work as an out-patient physical therapist in Gaylord, and most recently in Traverse City, Michigan. One of Mr. Hamilton's specialties is "specialized seating evaluations/recommendations" for wheelchair bound patients. (*Id.*)

Plaintiff represents that subsequent to the deposition of witness Grant Parsons, Director of Research and Development at ROHO, Mr. Hamilton reran an earlier test procedure he had undertaken using Mr. Parsons' suggestions for the different placement of a temperature sensor, producing in mid-January 2006, a report entitled "ROHO High Profile Temperature Test 1-14-06 Outcome/Synopsis." (Dkt. 205.) This report, characterized by counsel as a "supplemental report," describes a test performed on a test subject who was in a standard wheelchair "professionally adjusted" to the subject's body. The first page of this report summarizes the equipment used and the results obtained. Attached to this initial page is a temperature log listing the ambient air temperature in the facility where the testing took place. Next is a test protocol entitled "ROHO High Profile Cushion Temperature Test Protocol" modified consistent with the suggestions obtained during Mr. Parsons' deposition. After describing in detail the test protocol and listing a set of references, various charts and computer printouts showing temperature and pressure findings complete this so-called supplemental report. (*Id.*)

Defendant argues that although Mr. Hamilton was originally listed as an expert, Plaintiff withdrew this name. Subsequently, during another deposition, a videotape of a test protocol by Mr. Hamilton became a part of that earlier deposition. According to Defendant, both counsel later discovered that the videotape described in that deposition was incomplete. After Mr. Hamilton was found by Judge Lawson to be an expert witness, Defendant represents that on the last day

available for discovery, this supplemental report was produced. Defendant argues that the testing was done in an untimely fashion as counsel for Plaintiff, and arguably Mr. Hamilton, were both aware of the suggestions made in the earlier deposition which occurred almost five months prior to the production of the supplemental report. Plaintiff again points out in response that the earlier deposition came prior to major substantive production of documents by Defendant. In addition, Plaintiff argues that although Mr. Parsons implied that results would be different as a result of placing the temperature sensor in a different fashion, Mr. Hamilton's supplemental report in fact shows little difference in result. Plaintiff points out that at the time of the earlier deposition, neither counsel was aware that the tape shown at that time was incomplete, and at no time was it withheld and that only after diligent efforts was the complete video presentation found.

### **III. Governing Legal Standards**

As to proffered expert evidence, a trial judge performs a "gatekeeping" function under the Federal Rules of Evidence. The judge must determine whether the evidence is relevant and reliable. *See Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993). However, "vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.* at 596. "[A] trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152, 119 S. Ct. 1167, 143 L. Ed. 2d 238 (1999).

In *Daubert*, the Supreme Court laid out the standard for admissibility of scientific expert testimony under Rule 702 of the Federal Rules of Evidence. *Daubert*, 509 U.S. at 589-902; *see*

*Champion v. Outlook Nashville, Inc.*, 380 F.3d 893, 907 (6th Cir. 2004). The Supreme Court identified a non-exhaustive list of four factors to assist courts in determining whether an expert's reasoning or methodology is scientifically valid or reliable: (1) whether the theory or methodology has been or can be tested; (2) whether it has been subjected to peer review; (3) whether it has a known or potential rate of error; and (4) whether it has been generally accepted within the scientific community. *Daubert*, 509 U.S. at 593-94.

In *Kumho*, the Supreme Court held that the gatekeeping function under Rule 702 applies to all expert testimony, regardless of the basis of the expert's knowledge. *Kumho*, 526 U.S. at 147-49. The Court described the objective of gatekeeping in these terms:

[T]his is not to deny the importance of *Daubert*'s gatekeeping requirement. The objective of that requirement is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.

*Id.* at 152. Thus, regardless of the type of expert testimony at issue, the court must ensure that the expert's testimony is both "reliable and relevant." *Id.* at 149.

Rule 702 of the Federal Rules of Evidence was amended in 2000 to embody *Daubert* and *Kumho* principles and now states as follows:

If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. "*Daubert* ma[de] clear that the factors that it mentions do not constitute a 'definitive checklist or test.'" *Kumho*, 526 U.S. at 150. "A district court does not err in failing to mention the *Daubert* factors when they are not pertinent to assessing the reliability of a particular



expert.” *Ellis v. Gallatin Steel Co.*, 390 F.3d 461(6th Cir. 2004)(“[F]or example, an accurate assessment of a local real-estate market does not require peer review or extensive scholarly writing.”); *see First Tenn. Bank Nat’l Ass’n v. Barreto*, 268 F.3d 319, 334-35 (6th Cir. 2001); *see also Lake Mich. Contractors, Inc. v. Manitowoc Co.*, 225 F. Supp. 2d 791, 795 (W.D. Mich. 2002). However, “[n]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion offered.” *See General Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508 (1997).

#### **IV. Discussion**

##### **1. Dr. Felton**

Under the standards set forth above, I suggest that the findings and opinions of Dr. Felton should be admitted, as I find his opinions reliable and relevant within the meaning of *Daubert* and *Kumho Tire*. Although the cushion proposed in the article which Dr. Felton co-authored has not yet been produced, I note that the methodology and results of the article have been peer reviewed and contain comparative analysis and conclusions which can be tested and cross examined. Neither party has argued that the methodology utilized in this peer-reviewed article is not generally accepted within the scientific community. I am unable to discern that Dr. Felton’s opinions, as they apply to this case, are the *ipse dixit* of the expert. I agree with Plaintiff’s suggestion that under *Daubert*, this evidence should be subjected to the “traditional and appropriate” tests of trial, that is, the “vigorous cross examination, presentation of contrary evidence and careful instruction on the burden of proof[.]”

## **2. Dr. Middendorf's Deposition and March 2005 Expert Report**

I similarly conclude that Dr. Middendorf should be considered an expert and that the conclusions and opinions set forth in her deposition and her March 2005 report are sufficiently reliable and relevant to justify presentation to the jury. I note that this expert not only has academic background and practical experience in areas relating to human factors, but she also has degrees in safety engineering and counseling, and maintains professional membership in at least one engineering society. Whether or not Dr. Middendorf's opinions go to the ultimate issues of this case, I conclude that her opinions are relevant and reliable as to warning issues identified by Plaintiff and sought to be presented to the jury.

## **3. Kyle Hamilton's Supplemental Report**

I conclude that Mr. Hamilton's January 16, 2006, report is reliable and relevant. Mr. Hamilton is a trained and experienced physical therapist capable of testifying with authority concerning the proper adjustment of wheelchairs, the needs of patients such as Plaintiff, and the appropriate prescription, preparation, and use of cushions by such patients. I suggest that the January 2006 temperature test comes within the meaning of expert testimony under Fed. R. Evid. 702. The results reported appear to be the function of a significant stream of data which are the product of objective test criteria and methods applied in a consistent fashion. Whether or not Mr. Hamilton's opinions go to the ultimate issue of liability, I nonetheless conclude that they impact relevant issues and that these opinions can be of assistance to the jury.

It is expected that considerable technical testimony relating to the effects of pressure and temperature on both the cushion and the patient using the cushion will be presented to the jury. Mr. Hamilton's temperature test is relevant to these issues. It is clear from review of this test that within the meaning of *Daubert*, the test results can be tested and potential error discerned. In

addition, these results, although not peer reviewed, can, I suggest, be meaningfully evaluated through the crucible of cross examination.

#### **4. Dr. Middendorf's Supplemental Report**

Under the gate-keeping standards set forth above, I conclude that Dr. Middendorf's supplemental report lacks any meaningful indicia of reliability. The supplemental report is merely a proposal for the conduct of a later study. No results have been obtained which can be presented to a jury, because no study has yet been undertaken. I am entirely unable to see how a proposal for a future study can be of any assistance to the jury in evaluating the issues presented in this case. The absence of any meaningful results fatally undercuts the ability of this exhibit to meet any of the standards set forth in either *Daubert*, *Kumho Tire*, or Fed. R. Evid. 702. I therefore conclude that this supplemental report is inadmissible.

#### **IV. Order**

Accordingly, for the reasons set forth above, **IT IS ORDERED** that:

1. Defendant's Motion to Preclude Dr. Felton from Testifying at Trial (Dkt. 155) is **DENIED**;

2. Defendant's Motion to Preclude Dr. Middendorf from Testifying at Trial (Dkt. 156) is **DENIED**; and

3. Defendant's Motion to Exclude Plaintiff's Supplemental Expert Reports from Dr. Middendorf and Kyle Hamilton (Dkt. 154) is **GRANTED IN PART AND DENIED IN PART**. The motion is denied as to the Kyle Hamilton supplemental report and granted as to Dr. Middendorf's supplemental report.

**V. Review**

Review of this Order is governed by 28 U.S.C. § 636(b)(1), FED. R. CIV. P. 72, and E.D.

Mich. LR 72.1(d).

**IT IS SO ORDERED.**

s/ *Charles E Binder*

CHARLES E. BINDER  
United States Magistrate Judge

Dated: April 12, 2006

**CERTIFICATION**

I hereby certify that this Order was electronically filed this date and electronically served on Dennis M. Goebel, Milton S. Karfis and Grant W. Parsons.

Dated: April 12, 2006

By s/Mary E. Dobbick  
Secretary to Magistrate Judge Binder